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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/891,778	06/25/2001	William Hennenlotter	CSCO-98061	1806

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EXAMINER

SHAH, CHIRAG G

ART UNIT PAPER NUMBER

2664

DATE MAILED: 01/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	09/891,778	HENNENLOTTER, WILLIAM	
	Examiner	Art Unit	
	Chirag G. Shah	2664	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12/5/05.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 7, 20 and 39 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-6, 14-19 and 27-38 is/are allowed.
- 6) ☒ Claim(s) 7, 20 and 39 is/are rejected.
- 7) ☒ Claim(s) 8-13, 21-26 and 40-45 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments filed 12/5/05 have been fully considered but they are not persuasive.

Regarding claims 7, 20, and 39, Applicant argues that the discussion “higher level peer group A1 is adapted to visually represent a group in a hierarchical peer group A.2” fails to disclose the limitation “each cross-sectional representation is adapted to visually represent a group from a hierarchical layer.” Applicant alleges that peer groups A.1 to A.3 are groups at the same hierarchical layer instead of being peer groups from different hierarchical layers. Examiner respectfully disagrees that A.1 to A.3 are groups at the same hierarchical layer and redirects Applicant to Hansen reference, specifically to figure 7. Based on figure 7, A.1 and A.3 are groups at a different hierarchical level since A.1 is a lower hierarchical level associated with peer group A1 and A.3 is a lower hierarchical level associated with peer group B2 as well as peer group A1. The connection between B.4.5 and 13 enables to visually represent a group A.1 in a lower hierarchical level associated with peer group B2. Thus, since A.3 can visually be represented as a lower hierarchical level associated with another peer group B2, the limitation, “each cross-sectional representation (Higher level peer group A1) is adapted to visually represent one or more other groups (peer group A.3) from another hierarchical layer (Higher level peer group B1)” is clearly addressed. Therefore, claims 7, 20 and 39 respectfully remain rejected.

2. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 7, 20 and 39 rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant Admitted Prior Art (Figure 2, Page 2, lines 21 to Page 3, lines 6) in view of Hansen et al (U.S. Pub. No. 2002/0089964), hereinafter referred as Hansen.

3. Referring to claims 7 and 39, Applicant Admitted Prior Art discloses on page 2, lines 21 to page 3, lines 6 and in figure 3 of a cross-sectional method and a computer readable medium (node) for diagramming a network having a plurality of devices, comprising the steps of:

a) determining a plurality of hierarchical layers [center portion 32 represents the highest hierarchical layer, e.g., the trunk layer of figure 2] for said network (30), wherein said devices are arranged in said hierarchical layers [the rings 34, 36, and 38 represent different lower hierarchical layers as disclosed in figure 3];

b) determining one or more groups in each hierarchical layer, wherein each group includes at least one device [as disclosed on page 2, lines 21-23, figure 3 illustrates a cross-sectional diagram of the network described in figures 1 and 2, whereas the devices are arranged into hierarchical layers and groups as described in figure 2]; and

Admitted Prior Art fails to disclose network, wherein said multi-layered cross-sectional diagram has a plurality of cross-sectional representations which are similar to each other, wherein said plurality of cross-sectional representations have a plurality of sizes, and wherein each cross-forming a multi-layered cross-sectional diagram corresponding to said sectional representation is adapted to visually represent a group from a hierarchical layer and is adapted to visually represent one or more other groups from another hierarchical layer.

Hansen discloses in **fig. 7** of a multi-layered cross-sectional diagram corresponding to the network [**ATM Network**], wherein the multi-layered cross-sectional diagram of **fig. 7** has a plurality of cross-sectional representations [**peer group A1 and peer group A2, see fig. 7**], which are similar to each other [**both representation utilizes PNNI protocol providing flexible extendibility implemented by a hierarchical**

**network organization, see 0011]**, wherein the plurality of cross-sectional representations have a plurality of sizes [**the cross-sectional representation of peer group A1 includes 3 lower level peer groups A.1, A.2 and A.3; the cross-sectional representation of peer group A2 includes 2 lower level peer groups B.4 and B.5 establishing plurality of different size cross-sectionals, see fig. 7]**, and wherein each cross-sectional representation is adapted to visually represent a group from a hierarchical layer [**Higher level peer group A1 is adapted to visually represent a group in a hierarchical peer group A.2, see fig. 7; similarly Higher level peer group B2 is adapted to visually represent a group in a hierarchical peer group B.5, see fig. 7]** and is adapted to visually represent one or more other groups from another hierarchical layer [**Higher level peer group A1 is adapted to visually represent a hierarchical peer group A.3 from another hierarchical layer, see fig. 7]**].

Therefore, it would have been obvious to one of ordinary skills in the art at the time of the invention to modify the Applicant's Admitted Prior to include the features of having a cross-sectional diagram representing a group from a hierarchical layer and one group from another hierarchical layer as taught by Hansen in order to provide flexible extendibility to be represented implemented by a hierarchical network organization so that it can be introduced with minor changes in current systems and, with a view of future networks, it may be flexible to change.

4. Referring to claim 20, Applicant admitted Prior Art discloses on page 2, lines 21 to page 3, lines 6 and in figure 3 of a computer system for performing a method of diagramming a network having a plurality of devices, comprising the steps of:

a) determining a plurality of hierarchical layers [center portion 32 represents the highest hierarchical layer, e.g., the trunk layer of figure 2] for said network (30), wherein said devices are arranged in said hierarchical layers [the rings 34, 36, and 38 represent different lower hierarchical layers as disclosed in figure 3];

b) determining one or more groups in each hierarchical layer, wherein each group includes at least one device [as disclosed on page 2, lines 21-23, figure 3 illustrates a cross-sectional diagram of the network described in figures 1 and 2, whereas the devices are arranged into hierarchical layers and groups as described in figure 2]; and

Admitted Prior Art fails to disclose network, wherein said multi-layered cross-sectional diagram has a plurality of cross-sectional representations which are similar to each other, wherein said plurality of cross-sectional representations have a plurality of sizes, and wherein each cross-forming a multi-layered cross-sectional diagram corresponding to said sectional representation is adapted to represent a group from a hierarchical layer and one or more other groups from another hierarchical layer. Applicant admitted prior art fails to explicitly disclose of a computer system comprising a bus, a processor coupled to the bus; and a memory device coupled to the bus.

Hansen discloses in paragraph 0021 of a node including a HLR database for performing a method of diagramming and managing the location information for the plurality of devices, which imperatively must contain a bus, processor and memory

device. Hansen discloses in **fig. 7** of a multi-layered cross-sectional diagram corresponding to the network [ATM Network], wherein the multi-layered cross-sectional diagram of **fig. 7** has a plurality of cross-sectional representations [**peer group A1 and peer group A2, see fig. 7**], which are similar to each other [**both representation utilizes PNNI protocol providing flexible extendibility implemented by a hierarchical network organization, see 0011**], wherein the plurality of cross-sectional representations have a plurality of sizes [**the cross-sectional representation of peer group A1 includes 3 lower level peer groups A.1, A.2 and A.3; the cross-sectional representation of peer group A2 includes 2 lower level peer groups B.4 and B.5 establishing plurality of different size cross-sectionals, see fig. 7**], and wherein each cross-sectional representation is adapted to visually represent a group from a hierarchical layer [**Higher level peer group A1 is adapted to visually represent a group in a hierarchical peer group A.2, see fig. 7; similarly Higher level peer group B2 is adapted to visually represent a group in a hierarchical peer group B.5, see fig. 7**] and is adapted to visually represent one or more other groups from another hierarchical layer [**Higher level peer group A1 is adapted to visually represent a hierarchical peer group A.3 from another hierarchical layer, see fig. 7**].

Therefore, it would have been obvious to one of ordinary skills in the art at the time of the invention to modify the Applicant's Admitted Prior to include the features of having a cross-sectional diagram representing a group from a hierarchical layer and one group from another hierarchical layer as taught by Hansen in order to provide flexible extendibility to be represented



implemented by a hierarchical network organization so that it can be introduced with minor changes in current systems and, with a view of future networks, it may be flexible to change.

*Allowable Subject Matter*

5. Claims 1-6, 14-19, 27-38 allowed. Prior Art fails to disclose the step of forming a plurality of initial reduced-size cross-sectional representations each located in each section of the first cross-sectional representation, wherein each initial reduced-size cross-sectional representation is similar to the first cross-sectional representation, wherein each group from the first associated group forms one of a plurality of second linked groups each second linked group having the group from the first associated group and a second associated group having at least one group from a third hierarchical layer, wherein each initial reduced-size cross-sectional representation has a reduced-size outer portion and a reduced-size inner portion, wherein each reduced-size represents the group which is from the first associated group and which is associated with the section in which the reduced-size inner portion is located, and wherein each reduced-size outer portion has one or more reduced-size sections each reduced-size section corresponding to a group from the second associated group of one of the second linked groups in combination with other limitations set forth in the respective claims.

6. Claims 8-11, 21-26 and 40-45 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

*Conclusion*

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chirag G. Shah whose telephone number is 571-272-3144. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin can be reached on 571-272-3134. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2664

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

cgs  
January 4, 2006

  
**Ajit Patel**  
**Primary Examiner**